

## APPENDIX C12

It is possible to place the line connection control layer based on the common channel signaling system in a level above the IP layer, thereby omitting the UDP layer. Incidentally, the technique of placing the line connection control layer in a level above the IP layer is disclosed in the prior patent (Fig. 206 in Embodiment 13, or the like). The line connection control layer placed in the level above the IP layer is defined as a new protocol to provide, in a header beginning of a new protocol segment of the line connection control layer, a port field (16 bits × 2, when IPv4) in a form similar to a port field in a header of a UDP or TCP segment. This can overcome the defect that the UDP layer is omitted to disable the use of a port number. The new protocol segment of the line connection control layer is in a form similar to the UDP or TCP segment. There is an expectation on a merit that the IP communication unit is simplified. The technique, placing the line connection control layer based on a common channel signaling system in a layer above an IP layer, is applicable to all of communication cases 1 to 5.